



İlkokullarda Okuma Güçlüğüne Sağaltmaya Yönelik Kullanılan Öğretimsel Düzenlemelere İlişkin Öğretmen Görüşleri¹

Teacher's Views on Instructional Practices Used for Diminished Reading Difficulty at Primary Schools

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Öz

İlkokul 1. ve 2. sınıflarda ilkokuma yazma öğretiminde gözlenen sorunların başında okuma güçlüğü gelmektedir. Öğretmenlerin okuma güçlüğüne ilişkin algılarının ve okuma güçlüğüne yönelik çözüm önerilerinin belirlenmesi önem arz etmektedir. Bu kapsamda çalışmanın amacı öğretmenlerin okuma güçlüğüne ilişkin algılarının farklı değişkenlere göre belirlenmesidir. Çalışma Denizli Merkez ve ilçelerinde görev yapmakta olan 359 sınıf öğretmeni ile gerçekleştirilmiştir. Karma araştırma yöntemi ile yapılandırılan çalışmada verilerin toplanmasında Yurdakal ve Susar Kırmızı tarafından hazırlanan Okuma Güçlüğünde Kullanılan Öğretimsel Uygulamalara İlişkin Öğretmen Algıları (OGKÖÜİÖAÖ) ölçeği kullanılmıştır. Ölçeğin Chronbach's Alpha güvenirlik değeri 0.95 olup ölçek 4 boyut ve 33 maddeden oluşmaktadır. Toplanan verilerin analizinde SPSS 20 paket programı kullanılmıştır. Verilerin analizinde t-testi ve Anova testleri kullanılmıştır. Elde edilen nicel veriler nitel veriler ile desteklenmiştir. Araştırma bulgularına göre öğretmenlerin okuma güçlüğünde kullanılan öğretimsel uygulamalara ilişkin algıları cinsiyet ve kıdeme göre anlamlı farklılıklar arz etmektedir. Öğretmenlerin genel olarak okuma güçlüğüne ilişkin teorik bilgilerinin olduğu, bu öğrencilere yönelik sınıf düzenlemelerinin ve ek öğretimlerin yapılması gerektiği gelen görüşler arasındadır. Buna rağmen sınıf öğretmenleri okuma güçlüğüne yönelik kullanılması gereken yöntem-teknik ve stratejileri bilmediklerini belirtmektedir.

Anahtar Kelimeler: İlkokul, karma araştırma, okuma güçlüğü, sınıf öğretmenleri.

Abstract

Reading difficulty experienced by first and second graders is one of the main problems that primary school teachers have in teaching first reading and writing. It is of great importance to identify teachers' perceptions regarding reading difficulty and offer solutions based on these perceptions. The aim of this study was to identify elementary teachers' perceptions of instructional practices towards reading difficulty through an evaluation based on different variables. The study was conducted with 359 teachers working in the city centre and districts of Denizli. Mixed design was used in the study, and the Scale for Teachers' Perceptions of Instructional Practices Used for Reading Difficulty (STIPURD) developed by Yurdakal and Susar Kırmızı (2014) was employed to gather data. The Cronbach's Alpha reliability coefficient of the scale was 0.95, and it consisted of four dimensions and 33 items. The data obtained through the scale were analysed by using SPSS 20.0 package program. T-test and variance analysis were performed in data analysis. The results were supported with qualitative data. According to the results of the study, the teachers' perceptions of the instructional practices used for reading difficulty differed based on gender and seniority. It was found that the teachers had overall theoretical knowledge of reading difficulty and stated that classroom arrangements should be made for students having reading difficulty and different instructional practices should be implemented with supplementary teaching, but they said they did not know any strategies and techniques to use for reading difficulty.

Keywords: Mixed design, primary school, primary school teachers, reading difficulty.

1. Bu çalışma ilk yazarın "İlkokullarda okuma güçlüğünde yaşanan sorunlar ile eğitim uygulamalarına ilişkin öğretmen ve öğrenci görüşleri" başlıklı yüksek lisans tezinden üretilmiştir.

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Atıf / Citation: Susar Kırmızı, F., & Yurdakal, İ. H. (2019). İlkokullarda okuma güçlüğüne yönelik kullanılan öğretimsel düzenlemelere ilişkin öğretmen görüşleri. Kastamonu Education Journal, 27(2), 853-867 doi:10.24106/kefdergi.2893

1. Introduction

The information age that we are going through requires individuals to have an effective reading skill to acquire the necessary information and thus adapt to this age. Keeping pace with the rapidly changing society that we live in is only possible by reading (Yılmaz, 2008). With increasing information in the recent years, the importance of reading has become more crucial. In today's society, reading disorder has increased its importance as a communication skill day by day (Hu et al, 2010). In the process of acquiring information, the act of reading is not sufficient by itself, but comprehension is regarded as supplementary to this process. The interest in developing reading skills has increased among students, adults and responsible individuals of a complex and modern society (Akçamete, 1990). Today, due to these reasons, the importance attached to developing reading skills has increased.

Many views are available regarding the definition of reading, but it can be argued that there is not an agreement in the literature on these definitions. Demirel (1999, p. 59) defines reading as "the activity of making inferences out of written symbols with a cooperation of cognitive behaviours and psycho-motor skills", whereas Özdemir (1983, p. 12) defines it as "a cognitive activity based on making sense of, comprehending and interpreting printed words that are perceived with sense organs". "Reading is the process of individuals' comprehending and interpreting graphical symbols" (Hammill, 2004, p. 466). Reading is a crucial skill that contributes to the development of language and cognitive skills (Sylva & Hurry, 1996). Reading is a process including both cognitive elements and deductions made from variety texts that had main purposes (Cunningham & Stanovich, 2001). Considering the definitions of reading, it can be argued that it is not a simple activity, but a skill that is performed with the coordination of physical and cognitive functions.

Individuals who have a developed good levels of reading skills are successful during their education life. Reading has an important place in making progress in one's job and career and using one's free time (Şenol, 1999). Therefore, being competent in reading skills is necessary not only academically but also to be successful in many other areas. Reading is not merely reader's reading words but is a process of reaching the meaning of what is read. Human mind also performs many interrelated and complex tasks synchronously (Miller & Schwanenflugel, 2006). The definitions of reading show that it is not a simple process but consist of a complex structure including making sense of and analysing symbols that are perceived with eyes, and synthesising based on these analyses. It is of significance to acquire basic reading skills and implementing these skills in daily life. In this regard, the necessity of acquiring reading skills between the ages 4-15 is crucial to overcome difficulties to be experienced in later ages (Gülerer & Batur, 2004). Particularly, elementary first and second grades are critical in developing reading skills. In these grades, acquiring reading skills properly and effectively is important for students for their future. As a matter of fact, negative or wrong behaviours that children develop in these grades would follow them evermore (Binbaşıoğlu, 2004). Students who cannot read well in first grades cannot make use of books properly in later grades because their expression is poor (Avcıoğlu & Akçamete, 1996). Therefore, it can be argued that students in elementary first and second grade are in the critical period for acquiring effective reading skills. The first reading and writing education in elementary first grade forms the basis for mother tongue education. Individuals use the reading and writing skills that they gained in this period for their whole life. For this reason, mistakes made in teaching reading and writing negatively affect individuals' achievement in all courses they take in their educational process (Köksal, 2003). Effective reading skills play an important role in individuals' acquiring information and finding solutions for their problems. On the other hand, those who have not developed an adequate level of reading skills will have problems for the rest of their lives.

In the reading and writing process, every child cannot be expected to perform at the same level of achievement. Instructional problems encountered in regular classes are those mostly based on individual differences of children (Yangın & Sidekli, 2006). Examples of the reasons that cause such differences include genetic factors, social and economic status of the family, environmental factors and individual differences due to the child. In some cases, the failure of the students- especially the ones who have normal higher intelligence than normal – in the process of reading and writing may confuse family and teachers (Shaywitz & Shaywitz, 2003, p. 149). Although these students receive the same level of education, they fall behind their peers in basic skills such as reading and writing. In such cases, the first issue to considers is whether the child has learning disability.

Specific learning disability is a term that refers to individuals who have difficulty in academic skills such as reading, writing, processing information, spoken language, written language and thinking skills, but have average or above average level of intelligence (Mastropieri & Scruggs, 2004). According to the US National Joint Committee on Learning Disabilities (NJCLD), learning disability is a general term, and is a heterogeneous group of disabilities that are observed as significant difficulties in listening, speaking, reading-writing and reasoning, and acquiring and using mathematical skills (Korkmazlar & Kulaksızoğlu, 2003). This is one of the most common definitions used for learning disability. Reading difficulty is the most common among learning difficulties. Reading difficulty is a concept that refers to difficulties in reading

rate and fluency had by students not having any intelligence problems. Reading disorder was first defined as “blind of word” by Pringle Morgan. He also stated that this problem was genetic (Stein & Talcott, 1999, p. 60). It is the difficulty experienced in spite of a normal level of intelligence, and suitable opportunities in terms of the socio-economic status (Bruck, 1988). The reasons of reading disorders are not certainly known, but in research it has been identified that left hemisphere, temporal region and cerebellar regions of brains of individuals who experience reading disability did not work actively (Eckert et al, 2003; Eden et al, 2004; Paulesu, Demonet, Fazio, McCrory, Chanoine & Brunswick, 2001; Helenius, Tarkiainen, Cornelissen, Hansen & Salmelin, 1999; Hoeft et al, 2006; Horwitz, Rumsey & Donohue, 1998; Hu et al, 2010; Meyler et al, 2007; Shalev, 2004; Shaywitz et al, 2002; Shaywitz & Shaywitz, 2003; Simos, Breier, Fletcher, Bergman & Papanicolaou, 2000; Temple, 2002). Although reading disabilities are hereditary (Olson et al. 1989), likely to occur in men than women are more than twice (Flannery et al, 2000; Liederman et al, 2005). In another definition, reading difficulty is the difficulties that individuals have because of not having acquired one of the essential reading skills such as being able to recognise and analyse sounds, reading fluently, comprehending what is read, and having a sufficient level of vocabulary (Özsoy, 1984). Lyon (1995, p. 23) defines reading difficulty as “a problem language-based problem that is observed in word-analysis problems due to inadequate phonological processing”.

Students who could not acquire reading skills effectively at elementary school level experience problems in all courses other than the Turkish course. These problems go beyond the course context and also affect students’ whole education life and even their social life. Reading disorder is a difficulty affecting the individual in his/her entire life (Shaywitz and Shaywitz, 2003, p. 151), but it is a known fact if education together with timely and appropriate method technics is not provided to students having problems at reading ability especially in primary level, the problem will increase in further processes and get more difficult to be fixed. Elementary school teachers have an important role in diagnosing reading difficulty. A notable opportunity for teachers to diagnose students with reading difficulty is implementing read-aloud activities in elementary first and second grades. According to Stanovich (1986), reading words wrongly and slowly affects comprehension and also reduces reading experiences. Children with reduced reading experiences are deprived of the contribution of reading to language/cognitive skills (e.g. vocabulary, syntax knowledge).

Dyslectic students’ characteristics can be specified as follows; (Egan & Tainturier, 2011; Orton, Larue, Ensley & Stenmark, 1992; Shaywitz & Shaywitz, 2003; Stoodley & Stein, 2013, p. 267). Difficulty in learning and remembering words, opposite perception of writing units like b and d, numbers like 6 and 9, confused perception of writing units or numbers (like perception as “no to on”; “E to 3”; “21 to 12”), confusing the dotted and un dotted writing units (u-ü, o-ö, s-ş), skipping words while reading, confusing the sounds of syllables, having difficulty on making eye contact, having attention and balance problems, confusing the root-affix features of words, having problems ordering chronologically in historical context, late or inadequate speech, having difficulty in choosing the appropriate words for the meaning as speaking.

In research, 50.1% of children who need special education are classified as children with learning disability. Also 4.5% of all school-age student is described as children with learning disability (Mastropieri & Scrugs, 2004). When viewed from this aspect, about half of children who need special education have learning disability problem. As for major of children who have learning disability problem have reading disorders. While reading disorder is seen in 5-10% of general population (Pennington, 2002; Siegel, 2006), rate of incidence on school-age children is among 3-15% (Saviour et al, 2008), 3-17.5% (Shaywitz et al, 2002) and 10-15% (Lyon, Fletcher, & Barnes, 2003). Ferrer (2004, p. 2) remarks that individuals with reading disorder are 5-20% of general population. In addition, ‘in normal distribution, about 28% of students of first graders at primary school have reading disorder’ (Shaywitz, Escobar, Shaywitz, Fletcher, & Makuch, 1992, p. 145). Furthermore, the students with reading disorder are almost half - 80% as for according to some researches (Shaywitz ve Shaywitz, 2003) of the students with learning disability (Sundheim & Voeller, 2004). In this respect, teachers who have students needing special education in their classes must have knowledge about reading disorder and find out superior features of these students. When considered researches, it is seen that the gifted students with reading disorder are not diagnosed at schools or universities (West, 2005).

Consequently, one out of four individuals who need special education have reading difficulty. In this regard, teachers who have students needing special education in their classrooms should have knowledge of reading difficulty. Similarly, teachers’ competence in using methods-techniques, strategies, materials and tools, and effective classroom arrangements in the classroom that should be implemented in instructional processes plays an important role in solving problems of the students having reading difficulty. Because they are mainly responsible for equipping students with reading skills, teaching comprehension strategies and using suitable instructional methods towards reading problems are of great importance for first grade teachers in terms of students’ academic achievement (Baydik, 2011).

Elementary school teachers should prepare instructional materials that are suitable for the physical and cognitive characteristics of students, use the right strategies and reinforcers, ensure the classroom arrangement suitable to them and frequently check their reading level. 'Considering the existing instructional practices, there seems to be an information gap regarding the practices related to reading difficulty (Olofsson, Ahl & Taube, 2012, p. 1184). Moreover, as reading is not genetic like language learning, it is necessary to understand how their learning processes are in order to describe why individuals with reading disorders have difficulty in reading (Fawcett & Nicolson, 2008, p. 37). Without various modifications and arrangements ranging from physically arranging the learning environment to selecting curriculum outcomes, instructional materials and teaching methods, students with special needs cannot be expected to be successful in a class of students with mostly normal needs (Kargın, Güldenoğlu & Şahin, 2010). However, with regard to the practices in Turkey, these processes are disrupted due to either crowded classes or elementary school teachers not having adequate knowledge of special education and reading difficulty, which negatively affects students having reading difficulty and their families. When the literature on reading difficulty in Turkey is concerned, it can be argued that the number of studies on this issue is not sufficient. Examining suitable instructional practices for students with reading difficulty, who constitute a considerable proportion of individuals needing special education, is of significance for these students, their teachers and families. In this regard, a study that would identify elementary school teachers' instructional practices for students with reading difficulty, and the strategies and methods-techniques they use in the process can provide important insights to see the problems and deficiencies in these instructional practices. Such findings are expected to offer solutions for teachers.

The aim of this study is to examine whether teachers' perceptions, to find which problems significant for elementary school students and teachers, based on various variables. And identify teachers' views on reading difficulty.

In line with this aim, the research questions of the study are as follows:

- Do elementary school teachers' perceptions of the instructional practices used for reading difficulty differ based on
 - a) Gender, b) seniority, c) the faculty they graduated from?
- What are the teachers' views on reading difficulty?
- What are the instructional practices implemented towards students with reading difficulty based on the teachers' views?
- What are the classroom arrangements implemented towards students with reading difficulty based on the teachers' views?

2. Method

Embedded design, which is a mixed method design, was employed in this study. In this design, quantitative or qualitative data are gathered for the primary research question of a study, whereas the other type of data are also gathered to support these data (Creswell & Plano Clark, 2010 cited in Büyüköztürk et al., 2012). In the current study, it was aimed to support the quantitative data with the qualitative data. Either quantitative or qualitative data are usually used in studies. However, if required, quantitative and qualitative methods or techniques can be combined (Glesne, 2013). If the research design is suitable, both quantitative and qualitative methods can be used together (Büyüköztürk et al., 2012). This combination is called mixed methods research. Mixed methods research is an approach that is a combination of quantitative and qualitative methods or paradigms (Balci, 2013). Beside the power of combining quantitative and qualitative methods, mixed methods research is also preferred due to minimising the limitations of both approaches (Creswell, 2013). This study mainly included quantitative data, and the results obtained were aimed to be supported with qualitative data.

Sample/Participants

The population of the study consisted of all elementary school teachers (teaching first, second, third and fourth graders) working in the city centre and districts of Denizli province. A total of 1678 elementary teacher were working in Denizli at the time. Because it was not possible to the whole population, a sample was retrieved from the population. For the quantitative part of the study, cluster sampling, a probability sampling method, was employed. Cluster sampling is a method in which is used in the case where all clusters in the population (with all individuals) have the equal chance to be selected (Karasar, 2011, p. 114). In this type of sampling, the focus is on selecting a group or cluster that have certain characteristics rather than selecting individuals that can represent the population (Ekiz, 2009, p. 104). In the study, a list of all elementary schools of the Ministry of National Education in the city of Denizli was prepared, sufficient number of schools were selected from this list, and the study was conducted on these schools. The sample included 359 elementary school teachers working in the city centre and districts of Denizli. A sampling error of 0.05

and 359 individuals out of 1678 in the population are regarded as sufficient for a sample (Yazıcıoğlu & Erdoğan, 2004). For the qualitative part of the study, 60 voluntary teachers -who selected with random sampling- within the sample were interviewed. In simple random sampling the chance of each selecting units are equal (Alam, Sumy & Parh, 2015, p. 230).

Data Gathering Tools

In this study, two different instruments developed by the researchers were used to gather data. All the data gathering by researchers. The information regarding these instruments are presented below.

1. Scale for Teachers' Perceptions of Instructional Practices Used for Reading Difficulty (STPIPURD)

In the study, the "Scale for Teachers' Perceptions of Instructional Practices Used for Reading Difficulty (STPIPURD)" developed by Yurdakal and Susar Kırmızı (2014) was employed to gather the quantitative data (Yurdakal, 2014). The preliminary administration of the draft scale consisting of 66 items was done with 362 elementary school teachers. The sample of the study met the criteria for factor analysis, that is having a sample size of five times more than the number of items in a scale (Child, 2006). The measurement instrument was designed on a Likert-type grading scale with the options of strongly disagree, disagree, somewhat disagree, somewhat agree, agree and strongly agree. As a result of the pilot application, the KMO (Kaiser-Meyer-Olkin) value was found as 0.86. According to Hutcheson and Sofroniou (1999), the KMO value being between 0.8 and 0.9 shows that the sample size is at a very good level (Seçer, 2013). The KMO value being 0.86 shows that the sample size in this study is acceptable. Following the rotated factor analysis, 25 items with a factor loading value lower than 0.40 and eight items that had values in more than one factor were excluded from the scale. Because the eight items had high values in more than one factor after the rotated factor analysis, excluding these items was deemed to be suitable. The scale consisted of 33 items and four dimensions after the pilot study, and its Cronbach's Alpha reliability coefficient was 0.95, which is generally regarded as acceptable (Seçer, 2013). The factor loadings of the items were found to range between 0.48 and 0.78 in the first factor, between 0.53 and 0.78 in the second factor, between 0.54 and 0.75 in the third factor, and between 0.44 and 0.77 in the fourth factor. The Cronbach's Alpha value obtained from the actual administration of the scale was 0.97. First dimension is "educational activities", second dimension is "teaching reading and writing", third dimension is "gathering knowledge and share" and fourth dimension is "proposals to students".

2. Semi-Structured Interview Form

The "Open-Ended Question Form for Identifying Teachers' Views on Reading Difficulty", which was developed by the researchers, was used to gather data. In developing the form, literature review was conducted, and the questions were formed. These questions were presented to five faculty members who were experts in their field and five elementary teachers for their feedback. The questions were revised based on the feedback and the form was finalized with a personal information form added. The semi-structured interview form developed for the elementary teachers consisted of four questions and a personal information form. To reveal the consistency of the codes identified within the study, an agreement percentage was calculated for each question. In this calculation, the formula "Reliability=Agreement/Disagreement+Agreement x 100" was used (Miles & Huberman, 1994). By using this formula, an agreement percentage was obtained for each question. The reliability coefficient for the first question was 0.89, for the second question 0.95, for the third question 0.92, and for the fourth question 0.96. Interviews implemented by the researchers with teachers by one by one. To obtain the qualitative data, the teachers were interviewed by using the semi-structured interview form. The interviews, which took 25-30 minutes in average, were video-recorded.

Procedure (Data analysis)

In the analysis of the quantitative data, SPSS 22.0 package program was used. Independent samples t-test was performed to determine whether the teachers' perceptions differed based on their gender and the faculty they graduated from, and one-way analysis of variance (ANOVA) was employed to examine the difference in their perceptions based on seniority. The qualitative data were transcribed and read by the researcher's line by line. In this process, content analysis was applied to the data, and open-coding method was used. During Open coding the data are broken down into small parts, closely examined, and compared for similarities and differences, and questions are asked about the phenomena as reflected in the data (Strauss & Corbin, 1990). The codes that were related to each other were combined to reveal the themes, and interpretations were made. Each teacher was assigned a sequence number (1, 2, 3...58, 59, 60) and letters indicating their gender (F for female and M for male) in the quotations.

3. Findings

In this section, tables are presented with respect to each research question, and explanations for the tables are provided. To answer the first research question of the study, it was examined whether the elementary school teachers' perceptions of instructional practices towards reading difficulty differed based on their gender, seniority and the faculty they graduated from. Whether the teachers' scale scores regarding the practices towards reading difficulty differed based on gender was analysed by using independent samples t-test. The results are presented in Table 1.

Table 1. T-test Results of STPIPURD Scores Based on Gender

Gender	N	\bar{X}	sd	df	t	p
Male	164	173.80	13.68	357	3.20	0.01
Female	195	178.11	11.84			

The teachers' perceptions of the practices towards reading difficulty significantly differed based on gender, [$t(359) = 3.20, p < 0.05$]. The female teachers' perceptions of the practices towards reading difficulty ($\bar{X} = 178.11$) were more positive than those of the male teachers ($\bar{X} = 173.80$). In other words, there was a significant difference in terms of the scale scores regarding the practices towards reading difficulty based on gender, and this difference was in favour of the female teachers. Therefore, it can be argued that female teachers have more sensitive attitudes in the practices for reading difficulty. The teachers' scores from STPIPURD was also analysed based on the seniority variable, and the results are presented in Table 2.

Table 2. Descriptive Statistics for STPIPURD Scores Based on Seniority

Seniority	N	\bar{X}	sd
1-5	38	172.56	12.40
6-10	41	174.38	11.73
11-15	67	172.63	14.43
16- and above	213	179.71	13.71

To determine whether the teachers scores in STPIPURD significantly differed based on seniority, one-way analysis of variance (ANOVA) was used. The results of the analysis are presented in Table 3.

Table 3. ANOVA Results of STPIPURD Scores Based on Seniority

	Sum of squares	df	Mean of squares	F	p	Significant difference
Between groups	1869.58	3	623.19	3.84	0.01	A-C, B-C, D-C
Within groups	57543.59	355	162.09			
Total	59413.17	358				

$p = 0.010$

As is seen in Table 3, the difference between the groups was significant at the level of 0.05, [$F(3,355) = 3.84, p < 0.05$]. In other words, the teachers' perceptions of the practices towards reading difficulty significantly differed based on their seniority. To determine between which groups this different was, Scheffe test was performed and the results are presented in Table 4.

Table 4. Scheffe Test Results for The Seniority Variable

	Seniority	N	Subsetforalpha = .05	
			1	2
Scheffe(a,b)	11-15	67	171.67	
	1-5	38	176.73	176.73
	16-and above	213	176.84	176.84
	6-10	41		179.31
	Sig.			0.19

According to the results of the Scheffe test, the perceptions of the teachers who had one to five years experience ($\bar{X}=176,73$), 16 years and above experience ($\bar{X}=176,84$) and six to ten years experience ($\bar{X}=179,31$) were more positive than those who had 11 to 15 years experience ($\bar{X}=171,67$). In particular, the teachers with 16 years and above experience having higher scores than those with 11 to 15 years experience shows that as the seniority increases, they develop more positive perceptions regarding the issue. Independent samples t-test was used to determine whether the scores in STPIPURD differed based on the faculty the teachers graduated from.

Table 5. Independent Samples t-test Results of STPIPURD Scores Based on The Faculty Graduated From

Faculty	N	\bar{X}	sd	df	t	p
Education faculty	308	176.78	12.16	357	2.30	0.22
Other faculties	51	172.31	16.21			

As is seen in Table 5, no significant difference was found between the teachers' scores in the scale and the faculty they graduated from, [$t(357) = 2.30, p > 0.05$]. In brief, the teachers' perceptions of the practices towards reading difficulty did not differ based on the faculty graduated from. It is notable that although the perceptions of the teachers who graduated from an education faculty ($\bar{X}=176.78$) were expected to be more positive than those who graduated from other faculties ($\bar{X}=172,31$), the results did not support this expectation in this study. This can be explained by education faculty graduates not having sufficient knowledge of the practices for reading difficulty and not having taken a quality undergraduate education in this regard.

To answer the second research question of the study, "what are the teachers' views on reading difficulty?", the theme "teachers' level of knowledge" was revealed. The codes that were combined in this theme included: 1. Feeling knowledgeable. 2. Not having knowledge. The quotations with regard to the code "feeling knowledgeable" under the theme "teachers' level of knowledge" are presented in Table 6. Teachers in the same views presented the same or similar views on the subject.

Table 6. Teachers' Views on The Code "Feeling Knowledgeable"

Teacher views (direct quotations)	Teachers' Personal Characteristics
Reading difficulty is individuals' not being able to express themselves and having communication problems.	(2, F), (3, M), (15, M), (18, M), (22, F), (23, M), (26, M), (46, F), (48, F), (35, F), (37, M)
Reading difficulty is a reading-writing problem experienced by children with average or above-average intelligence.	(5, M), (52, F), (55, M), (53, F), (60, F), (8, F), (28, M)
All of these students are gifted children.	(14, F), (7, F), (17, F), (20, M), (24, F), (59, F), (47, F)
This problem can be solved with sufficient training and attention.	(13, F), (19, F), (25, M), (58, M), (1, F), (56, M), (49, M)
These students have problems such as getting bored of reading and not being able to make connections between words.	(11, F), (12, F), (21, F), (27, F), (34, F), (33, F)
It is the problem of reading words with different letters or confusing the letters.	(45, F), (6, M), (9, F)
It is the problem of not being able to perceive the difference between the imaginary world and the real world.	(10, F), (16, F)
TOTAL	43

According to Table 6, 43 teachers perceived themselves as knowledgeable regarding reading difficulty. In their views, they stated that these students got bored of reading, read some letters wrongly and had communication problems. These pieces of information being true shows that the teachers had a certain level of theoretical knowledge on reading difficulty. It was also found the some of the teachers who stated that they had sufficient knowledge of reading difficulty provided wrong pieces of information such as that these students would improve with a better training, they were gifted children, and this problem was a disorder. Two teachers also asserted that students experiencing reading difficulty had the problem of "not being able to perceive the difference between the imaginary world and the real world. The quotations regarding the code "not having knowledge" under the theme "teachers' level of knowledge" are presented in Table 7. Seventeen teachers stated that they did not have knowledge of reading difficulty.

Table 7. Teachers' Views on The Code "Feeling Knowledgeable"

Teacher views (direct quotations)	Teachers' Personal Characteristics
I heard the term reading difficulty, but I don't know anything about its content.	(57, F), (51, M), (43, M), (44, F), (40, F), (36, F), (30, M), (31, F), (29, F)
I know nothing about reading difficulty.	(54, M), (50, F), (41, F), (42, M), (38, F), (39, M)
I don't know much about reading difficulty.	(4, M), (32, F)
TOTAL	17

As is seen in Table 7, 17 teachers did not have any knowledge of reading difficulty, or only had very little knowledge. The teachers not having knowledge on this concept can be associated with their insufficient training either in in-service trainings, or their undergraduate education. It was found that the teachers had knowledge of reading difficulty in general, but theoretically their knowledge were either insufficient, or lacking. In particular, the teachers thinking that their level of knowledge on reading difficulty was sufficient stated either wrong, or partial information, which shows that they experience deficiencies regarding this concept.

Findings for the Third Research Question

With respect to the third research question of the study, the theme "instructional activities and arrangements" was revealed. The codes that were combined in this theme included: 1. raising parents' consciousness, 2. providing supplementary teaching to students. The quotations regarding the code "raising parents' consciousness" under the theme "instructional arrangements that teachers need to make" are presented in Table 8.

Table 8. Teachers' Views on The Code "Raising Parents' Consciousness"

Teacher views (direct quotations)	Teachers' Personal Characteristics
I try to raise parents' consciousness on reading difficulty.	(21, F), (27, F), (34, F), (33, F), (14, F), (7, F), (17, F)
I cooperate with parents to support students.	(15, M), (18, F), (6, M), (9, F), (47, F), (49, M)
I contact parents and make them take care of the student one-to-one.	(45, F)
TOTAL	14

As can be seen in Table 8, 14 elementary teachers emphasized that it was necessary to raise parents' consciousness within the theme of instructional activities and arrangements. The teachers believed that because students with reading difficulty spent most of their time at home with their family, the families needed to be informed about reading difficulty. In this way, they would be informed of the instructional activities and methods that are effective in terms of reading difficulty and be able to implement these on their children. In addition, the views included the families being in contact with teachers throughout the instructional process, and reducing the problems stemming from families, if any, to the minimum with cooperation. The quotations regarding the code "providing supplementary teaching to students" under the theme "instructional arrangements that teachers need to make" are presented in Table 9.

Table 9. Teacher Views on The Code "Providing Supplementary Teaching to Students"

Teacher views (direct quotations)	Teachers' Personal Characteristics
I provide supplementary teaching to students with reading difficulty individually because they fall behind their peers.	(20, M), (1, F), (56, M), (3, M), (22, F), (60, F), (5, M), (52, F), (16, F), (12, F), (21, F), (55, M), (53, F), (2, F), (37, M), (34, F), (10, F), (4, M), (32, F), (57, F), (51, M), (43, M), (44, F), (40, F), (36, F), (30, M), (31, F)
I arrange additional study hours with simple texts.	(59, F), (23, M), (35, F), (8, F), (28, M), (11, F), (27, F), (13, F)
With supplementary teaching, I move on slower than I do with other students, and step by step.	(19, F), (33, F), (41, F), (42, M)
I provide supplementary teaching to students by using concept maps and story maps.	(26, M), (39, M), (46, F)
I do activities that support students' social development and enhance their confidence.	(48, F), (24, F), (38, F)
I do reading-writing activities with the student on set hours.	(25, M), (54, M), (50, F)
I hold oral exams that are suitable for the student's level instead of written exams.	(58, M), (29, F)
TOTAL	46

Forty-six teachers mentioned providing supplementary teaching with regard to the instructional activities and arrangements that need to be performed. As is seen in Table 9, according to the teachers' views, the students having reading difficulty fall behind their peers in terms of both reading and writing, and the academic differences between them and their peers increase even more in the instructional process. In this context, the teachers stated that supplementary teaching should be provided for students experiencing reading difficulty. The views also included that such supplementary teaching should be conducted in or after classes. Some of the teachers indicated that in addition to supplementary teaching, different instructional practices towards students with reading difficulty should be implemented. At the same time, the participants stated that students' skills of empathy and confidence should especially be developed for solving the problems that they experience socially. They indicated that in terms of evaluation, holding oral exams were more suitable than written exams. These data show that the teachers had exact knowledge regarding supplementary teaching and instructional practices, and this knowledge overlapped with scientific facts.

Findings for the Fourth Research Question

To answer the fourth research question of the study, the theme "arrangement of the physical environment" was revealed. The codes that were combined in this theme included: 1. In-class arrangements 2. Seating arrangement 3. Equipment arrangement. The teacher views identified related to the code "in-class arrangements" under the theme "arrangement of the physical environment" are presented in Table 10.

Table 10. Teachers' Views on The Code "In-Class Arrangements"

Teacher views (direct quotations)	Teachers' Personal Characteristics
Because these students read the letters in reverse order, our classrooms should have mirrors.	(45, F), (11, F), (27, F), (13, F), (26, M), (46, F), (19, F)
The texts on the boards should be large in font size.	(15, M), (18, M), (6, M), (23, M), (35, F)
The classroom should be arranged colourfully, and, in a way, that would attract students' attention.	(9, F), (47, F), (49, E), (21, F), (59, F)
These students should be provided with education in different classrooms arranged according to their individual characteristics.	(16, F), (53, F), (41, F), (42, M)
TOTAL	21

In the study, 21 teachers pointed out the important of physical arrangements. As can be seen in Table 10, the teacher stated that classrooms having different physical equipment towards these students should be opened, and these classrooms should have mirrors. Because the case of being socially incompetent, which is one of the biggest problems of the students with reading difficulty, would increase when they are taught in a separate classroom, it can be argued that this view of the teachers is not right. In addition, it is notable that some teachers knew these students read letters in reverse order and having mirrors in the classroom could solve this problem. There are no scientific studies with respect to the use of mirrors in the classrooms towards students with reading difficulty. It is not exactly known how the teachers had this assumption. Besides, the participants were aware that in the education of students with reading difficulty, the physical arrangement of the classroom should be colourful and interesting as well as have boards with large visuals and texts. Colourful materials and interesting tools may be attracted student's attentions.

In the study, teacher views were also identified with regard to the code "seating arrangement" under the theme "arrangement of the physical environment". Their views related to the code "seating arrangement" are presented in Table 11.

Table 11. Teachers' Views on The Code "Seating Arrangement"

Teacher views (direct quotations)	Teachers' Personal Characteristics
At first, the deficiencies of these students should be addressed by putting them into a separate group/class, and then, they should be distributed into groups in a way they can interact with other students.	(38, F), (39, M), (58, M), (29, F), (12, F), (21, F)
Students should sit around a U-arrangement to overcome their communication problems.	(8, F), (28, M), (48, F), (24, F), (33, F), (14, F)
These students should be brought to front desks and be paid more attention.	(36, F), (30, M), (31, F)

Teacher views (direct quotations)	Teachers' Personal Characteristics
Teachers should make these students sit close to the teacher's table so as to be able to help them any moment.	(55, M), (33, F)
Students with reading difficulty should sit next to their peers who do not experience this problem and are successful.	(17, F)
TOTAL	18

In the study, 18 teachers mentioned the seating arrangements in the classroom. As is seen in Table 11, the teacher provided broadly two views on the seating arrangements for students with reading difficulty. One of these views was U-shaped or cluster group arrangement, and in this view, students were supposed to interact with their peers and be in a place where the teacher can see them any moment. The other view was the students with reading difficulty sitting on front desks next to their peers who were good at reading and writing skills. Considering the problems these students experience in the social context and that they should sit where the teacher can see them because they have distraction problems, the teachers' views seem to be in the expected direction and correct. According to the research findings, the quotations regarding the code "equipment arrangement" under the theme "arrangement of the physical environment" are presented in Table 12.

Table 12. Teachers' Views on The Code "Equipment Arrangement"

Teacher views (direct quotations)	Teachers' Personal Characteristics
Equipment that can facilitate reading and writing especially designed for such students should be used.	(60, F), (5, M), (52, F), (2, F), (37, M), (34, F), (25, M), (54, M), (50, F), (27, F), (34, F)
The materials to be used for these students should be interesting and easy to read.	(32, F), (57, F), (51, M), (43, M), (7, F)
Visual equipment should be used in the classrooms.	(20, M), (1, F), (44, F), (40, F)
Equipment to facilitate these students' recognising letters should be used.	(10, F), (4, M)
TOTAL	21

Twenty-one teachers mentioned equipment with respect to the arrangements in the classroom. As can be seen in Table 12, 10 teachers emphasized the necessity of using special equipment towards students with reading difficulty in the classroom. They also stated that such equipment should be suitable to students' physical, cognitive and academic characteristics. In particular, the participants thought that the equipment should improve students' reading skills and attract students' attention. Based on the data obtained, it can be argued that the elementary teachers had correct knowledge related to the equipment that should be used for students with reading difficulty. Twenty-one teachers revealed views confirming the scientific knowledge with regard to the use of equipment. Appropriate equipment that suitable for students who are reading disorderly may facilitate their reading problems.

4. Discussion and Suggestions

The results of the study showed that the relationship between the scale scores for the practices towards reading difficulty and gender was significant, and this relationship was in favour of the female teachers. This can be explained by that female teachers are more conscientious in instructional practices and more sensitive towards children. Tillotson (2011) also found a significant difference between elementary school specialists' perceptions of reading difficulty and gender in favour of female participants, which is consistent with the results of the current study.

Another result of the study was that there was a significant difference between the scale scores and the teachers' seniority. The perceptions of the teachers who had one to five years experience ($\bar{X}=176,73$), 16 years and above experience ($\bar{X}=176,84$) and six to ten years experience ($\bar{X}=179,31$) were more positive than those who had 11 to 15 years experience ($\bar{X}=171,67$) based on their scores in the scale. In particular, the teachers with 16 years and above experience having higher scores than those with 11 to 15 years experience shows that as the seniority increases, they develop more positive perceptions regarding the issue. In a US study, Tillotson (2011) examined the perceptions of education specialists working at elementary schools on reading difficulty and could not find a significant relationship between the specialists' seniority and perceptions. In the study, no significant difference was found between the teachers' scores in the scale and the faculty they graduated from. Although graduates of an education faculty were expected to have more positive perceptions of instructional practices than the graduates of other faculties, it is notable that there was no significant difference in-between. It is thought-provoking that while education faculties perform their basic function, which is to train teachers, they have not been able to equip their students with the necessary knowledge of reading difficulty as a topic that has been regarded as important in recent years. This can be explained by the fact that in education faculties, particularly in elementary teaching and Turkish language teaching programs, there are no courses that focus on reading difficulty. Reading difficulty is a current issue with an increasing importance lately. Reading difficulty not being fully known by teacher candidates | Kastamonu Eğitim Dergisi, 27(2), 2019 |

means that students having problems in this respect can not be detected. Consequently, students with reading difficulty can face with not being able to receive the necessary support and live with their problems for their whole life. However, the expert supports these students will receive after they are detected can change many aspects of their lives. In their study, Yurdakal and Susar Kirmizi (2015) aimed to identify teacher candidates' views and thoughts on reading difficulty and found that the candidates had general theoretical knowledge related to reading difficulty, but they did not have sufficient knowledge on what to do in the practice process.

In another study, Yigiter (2005) examined elementary teachers' levels of knowledge on special learning difficulty based on the variables including age, gender, the state of having received information on special learning difficulty or not, the sector worked in, the number of students in the classroom and the state of finding their knowledge of special learning difficulty sufficient or not. The study found that elementary teachers' levels of knowledge on special learning difficulty differed based on all these variables examined. On the other hand, their levels of knowledge did not show a significant difference based on their state of having students with reading difficulty in the classroom or not.

When the findings revealed from the qualitative part of the study were examined, it was found that the teachers had general theoretical knowledge of reading difficulty. However, they also provided some wrong pieces of knowledge, which they accepted as correct, with respect to reading difficulty. An example of this was the statement of having mirrors in the classrooms to prevent students with reading difficulty from reading letters such as b-d from reverse. Particularly, the teachers knew that students with reading difficulty experience communication problems, cannot analyse the parts of a text they read, and cannot answer end-of-text questions by making inferences from the text. These results support the previous studies in the literature. Kocaarslan (2013) found that elementary teachers knew some of the problems that students with reading difficulty have in their reading process. Some of these problems include the following: Not being able to associate their prior knowledge to what they read, synthesize (reach the holistic meaning), make inferences (use the clues in context), establish cause-effect relationship and focus on meaning by sticking to details. In addition, the teachers were aware of other problems of students with reading difficulty in their reading process such as repeating words, making mistakes in reading words in a text, reading by syllables, having problems in expressing themselves, having difficulty in writing and mathematical skill in addition to reading, and reading words by changing the places of some letters. According to the results of the study, seven teachers stated that some students with reading difficulty had high level of intelligence, whereas two teachers said they had problems with distinguishing dream and reality. Seven teachers said that these students can fully overcome reading difficulty if they receive a good training and do supplementary activities. Although the reason behind reading difficulty is not exactly known, it is stated that the brains of these individuals operate differently (International Dyslexia Association, 2002; Özgür, 2008) and it is possible to minimise the effects of reading difficulty through suitable education programs (Given, 1996; Exley, 2003; Baydık, 2006; Özgür, 2008; Güzel-Özmen, 2010; Melekoğlu, 2010; Baydık, Ergül & Bahap-Kudret, 2012; Sakallı-Gümüş, 2013).

In the study, 23 teachers indicated that in addition to supplementary teaching, different instructional practices towards students with reading difficulty should be implemented. At the same time, they thought that students' skills of empathy and confidence should especially be developed for solving the problems that they experience in social life. According to the study, the teachers were found not to know special techniques for reading difficulty, and thus, not to use special methods and techniques related to reading difficulty. These results are contrary to the previous studies in the literature. Altun, Ekiz and Odabaşı (2011) reported that elementary teachers encountered many reading difficulties and used various practices to cope with these difficulties. In the research findings, the teachers thought their practices were effective to a certain extent, however, did not perceive themselves as sufficient. Furthermore, their views included presenting reading texts that are easier for these students than for their peers and holding oral exams rather than written exams regarding assessment. The teacher views revealed that students with reading difficulty lagged behind their peers in both reading and writing. In the educational process, the academic differences between these students and their peers would become larger in the following years. Accordingly, the teachers stated that supplementary teaching should be provided for students experiencing reading difficulty. The views also included that such supplementary teaching should be conducted in or after classes. Fourteen elementary teachers emphasized that it was necessary to raise parents' consciousness within the scope of instructional activities and arrangements. In a study with elementary school teachers, Koç (2012) reported that teachers raised the awareness of parents on reading difficulty by meeting them. In this way, students with reading difficulty received more help. This study is consistent with the results of the current study.

Moreover, the teachers' views included that they used concept maps and story maps towards students with reading difficulty, and these techniques developed reading skills and vocabulary. In Baydık's study (2011), it was found that teachers used the story map technique for students with reading difficulty and this was the most frequently used technique. This study overlaps with the results of the current study. According to seven teachers who participated in the study, students with reading difficulty spend most of their time with their families at home. Therefore, they thought that families should be informed about reading difficulty, know the instructional activities and methods-techniques for such students, and teachers should be in contact with families throughout the educational process. In addition, their views included reducing the problems stemming from families, if any, to the minimum with cooperation.

Six teachers stated that students with reading difficulty should be provided education in different classrooms having suitable physical equipment. At the same time, classrooms should be arranged in a way that is suitable to the physical and cognitive characteristics of students with reading difficulty. However, social behavioural problems and introversion observed in these students would increase if they are taught in separate classes from their peers. Seven teachers

argued that there should be mirrors in classrooms because students with reading difficulty read letters from reverse. The teachers thought that students' writing letters reversely can be prevented in this way. Based on these data, it was found that the teachers knew that students with reading difficulty write letters reversely. Furthermore, stating that they should use mirrors to overcome the problem of writing reversely can be accepted as an indicator of their experiencing problems in practice. On the other hand, their views included that the physical arrangement of the classroom should be colourful and attention-grabbing and be supported with boards having big visuals and texts. Ten teachers pointed out that special equipment should be used towards students with reading difficulty in classrooms, and such equipment should be suitable to the physical, cognitive and academic characteristics of students. Particularly, the participants stated that the equipment should improve students' reading skills and attract students' attention.

The teachers' statements revealed that the seating arrangements that they used for students with reading difficulty were notable. Six teachers adopted U-shaped or group seating arrangements because they knew the social problems of students with reading difficulty. Besides, one teacher thought that these students should sit next to a successful peer. Additionally, two teachers stated that they had these students sit near to them so that they could take care of them individually and observe their progress. Kocaarslan (2013) reported that teachers formed a cooperative reading environment to address reading problems. Koç (2012) examined elementary school teachers' practices for their students with learning difficulty and found that most of the teachers did individual activities with these students, had them sit near the front or next to a successful student, or supported their work with a successful student. The findings revealed in the study are consistent with those found in the current study.

5. Suggestions

The following suggestions can be offered based on the results of the study:

- The Ministry of National Education should organise in-service trainings, seminars or conferences on identifying reading difficulty, the most frequently encountered problem by elementary school teachers, and the instructional practices to be implemented for this problem. Moreover, applied trainings can be conducted to change the misconceptions about reading difficulty.
- An elective course can be added to the curricula of education faculty programs.
- While providing equipment for elementary schools, the Ministry should consider students experiencing reading difficulty. It should be paid attention to have equipment suitable to the physical and cognitive characteristics of these students.
- The Ministry can organise events to inform the parents of students with reading difficulty on this problem.
- The elementary curriculum prepared by the Ministry should include explanations for the strategies to be used for reading difficulty.
- Elementary school teachers should identify the problems that students have with respect to reading difficulty and use methods and strategies accordingly. When necessary, units where teachers can learn these methods and strategies in the provincial directorates of national education.
- Considering the problems that students with reading difficulty have in social context, elementary school teachers should create cooperative environments for these students. Informative seminars should be organised on this issue, or teachers should cooperate with guidance units.

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